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AUTHOR Mearns, Curt
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ABSTRACT

The Student Career Awareness Network (SCAN) at L. B. Johnson Middle School, New Mexico, seeks to target a wide range of students with differing abilities while incorporating School-To-Career's philosophy of instruction. SCAN uses work-related experiences such as project-based assignments, applications-based instruction, hands-on experience, and working in teams. The philosophy targets the needs of low-achieving students, English language learners, the economically disadvantaged with mild to severe disabilities as well as the gifted, and a broad range of students with no identified disabilities. In this evaluation of the first year of program implementation, general education students from five classes of a social studies teacher participated in the program. Two classes received the full SCAN program, two other classes received sensitivity/employability training only, and a fifth class had no particular focus on work education. The evaluation showed that the program followed the proposal very closely. The SCAN program increased the motivation of special education students and may have given both special and regular education students a more realistic view of the work place as evidenced by their change in motivation for school subscale scores. The program appeared to enhance the interactions between special and regular education students. Some plans for the SCAN program in subsequent school years are outlined. Appendix A lists program goals, and Appendix B is an essay titled "Classroom Assessment of Attitude Change" by Kristen Cruser and Shelly DeAbreu. (Contains 22 references.) (SLD)

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Student Career Action Network: L. B. Johnson Middle School

Albuquerque Public Schools
1997-98

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Curt Mearns Ph.D.
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GEORGE J. BELLO
Associate Superintendent

Program development by: Kristen Cruser, Shelly DeAbreu.
Additional collaborators: Mary Dawes, Ron Murray.
Assistance provided by: Ginger Blalock Ph. D and Elizabeth Keefe Ph. D. of University of New Mexico, College of Education.

RESEARCH, DEVELOPMENT AND ACCOUNTABILITY
930-A Oak Street SE
Albuquerque, New Mexico 87106
(505) 764-9710
Rose-Ann McKernan: Director

Student Career Awareness Network at L. B. Johnson Middle School
1997-98 School Year Evaluation

INTRODUCTION

Reform and restructuring have long been topics of discussion within the field of education. The fundamental question appears to be: How do we best educate all students and help each achieve his or her full potential? This question must be asked and answered for all students, especially those with significant disabilities. The Student Career Awareness Network (SCAN)[1] at L. B. Johnson Middle School offers one model that provides an answer for this question.

SCAN, an innovative program at L. B. Johnson Middle School, seeks to target a wide range of students with differing abilities that incorporates School-To-Career's philosophy of instruction. SCAN uses work-related experiences such as project-based assignments, applications-based instruction, hands-on experience and working in teams. The philosophy targets the educational needs of low-achieving students, English language learners, the economically disadvantaged, students with mild to the most severe disabilities as well as the gifted, and a broad range of students with no identified disabilities.

GENERAL PROGRAM DESCRIPTION

This year L. B. J. Middle School SCAN students first experienced a class on sensitivity/employability skills training in which both general education and special education students participate throughout the year. The sensitivity/employability skills training included: a personality inventory, an interest inventory, a stereotypes/fact discrimination attitude survey, discussions on employability skills and creative thinking, information on various disabilities, differing learning styles, assistive technology for disabilities, goal setting exercises, discussions on stereotypes, and self-determination. The purpose was to inform all students about disabilities, various learning styles, various cultural differences, and life as an employee.

The next two components that students experienced required general education and special education students to be paired for the work experience and site visits. This pairing allowed each student to get to know the other personally. Students remained in their pairs for the rest of the SCAN activities.

This year, the work experience activity was a landscaping project. It began with classroom instruction about landscaping plants and the local Albuquerque environment comprising a combined applied-biology and ecology lesson. Next, pairs of general education and special education students worked in teams to complete the landscaping project on the school grounds. Students worked with tools and materials found at most landscaping job

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[1] SCAN is an APS developed program and is not specifically associated with the Secretary's Commission on Achieving Necessary Skills (SCANS).

sites. The work experience component demonstrated to students the necessity for having a knowledge base of the subject matter on the job, as well as experience working with other individuals.

Six work sites made up the site visit component. The site visit component helped students see practical application of their school studies in actual business settings and to see first-hand what employability skills are sought by employers. The students visited local businesses in the city of Albuquerque. The Albuquerque business community has been very interested in the opportunity to speak to students at such an early age. Employers who work with SCAN program designers are eager to show the applied aspects of math, science and reading skills at their establishments. They also discuss personnel attitudes and behaviors expected at the work place.

Program Goals

The five major goals of the L. B. J. SCAN Program are listed below. Further detail regarding the goals and objectives may be found in Appendix A.

1) To strengthen skills leading to increased employability of all students:

This goal has been a major focus of the School-To-Careers program at APS. This goal is particularly important to low functioning students for increasing future employability. Finding the specific abilities and interests of these students may require special attention to assistive devices or a breadth of exposure to many kinds of tasks. Additionally, job related attitude and behavioral expectations are discussed. For example, the consequences of arriving to work intoxicated, dealing with difficult coworkers, and dress codes are discussed.

2) Design all activities to meet general education goals:

All activities represent district priorities for education. For example, biology, physics and health are taught at various site visits; however, the focus is applied in an actual workplace rather than on lessons from a book. Additionally, information on how to get along with others, and tolerance for individual differences are considered important general education goals. Generic employability skills all companies require are considered general education goals. There is an emphasis on integrated contextualized academics, improving basic and core academics connecting L. B. J. Middle School to its cluster schools and community resources. Training on establishing lifelong goals for successful transition into the workplace is provided.

3) Expand inclusive practices:

By pairing general education and special education students throughout the activities, students learn about each other and learn to work with one another. Program designers hope that students from our district with SCAN experience will become natural peer supports of integrated practices in the workplace as adults.

4) Contribute to staff development:

Staff development will be met in three ways. First, special education and general education teachers will work together for the sensitivity/employability skills training, as well as working together organizing field trips. Second, teachers at L. B. J. will be provided with

three seminars which address issues related to inclusive practices, School-To-Careers, or employability issues. Third, evaluation results will be disseminated to faculty members for educational purposes, for feedback, and for further planning. Workshops, articulation meetings, collaborations with UNM, publications, and presentations at conferences will be used to disseminate results of evaluation efforts.

5) Increase parental involvement:

The staff at L. B. J. will market the program to increase parent acceptance of inclusive activities. Newsletters, parent-sponsored fundraisers and conferences are planned. Parents are considered resources for speakers, internships, apprenticeships, job sampling/shadowing, and site visits. Parents are also considered resources for transportation, chaperones, and mentoring.

Activities

Work-based experiences promoted the development of broad, transferable skills. Two often-cited weaknesses of traditional workplace education are its focus on narrow, technical training for specific occupations, and its emphasis on basic employability over higher order thinking skills (Salvey, 1995). SCAN took steps to ensure that work site learning fostered the development of broad transferable skills that expand rather than restrict students' career and educational options. The activities that promoted these skills included:

- Exposing students to all aspects of an industry rather than a single occupation;
- Exposing students to a wide range of industries, and
- Emphasizing the development of the social skills needed to work effectively in any organization (the ability to work in teams, communicate clearly, and manage time).

SCAN staff employed three major activities that are carefully designed to meet the goals discussed above. One activity is classroom-based general education about disabilities, variation in learning styles and skills, as well as employability skill information. Two additional activities are work-based, on-site, job-related, and application oriented. The sensitivity/employability skills training activity provides general education and special education students with specific information about individual differences resulting in disabilities, as well as skills, behavior, and attitude issues related to holding a job. The landscaping activities on school grounds set the pattern for the following site visits, introduced general education & special education students to each other in a controlled school environment, and provided additional job related experience. The landscaping project provided on-going job site experience on campus. Further, it provides the entire school with a nature center that can be used to teach all students about native plants and local biology issues. The job related site visit activity demonstrates the breadth of jobs available to students while including applied examples of general education disciplines.

METHODS AND SUBJECTS

This evaluation follows the plan submitted in the proposal to the APS School to Careers office. Although goals 1 and 3 are evaluated with indirect outcome measures, the remaining goals provide the foundation for a process evaluation. Students from the special

education class included those with the most severe disabilities. General education students from five classes of a social studies teacher participated in the program. Those general education students participated at different levels. Two classes received the full SCAN program. Two other classes received the sensitivity/employability training only, and a fifth class represented general education students throughout the school who have no particular focus on school to work education.

Limitations

This report pioneered evaluation methods that may be used in future evaluations of this program. This is an evaluation of the first year of SCAN program implementation. Program planners consider the results baseline data. Additionally, in the 1998-99 school year, program planners expect to include more general education teachers as well as introduce new program components. Although special education students in this study represent a population with severe disabilities such as autism and cerebral palsy with limited response ability, the result may generalize to less severe populations. SCAN provides students with every ability level on the continuum between general and special education with the opportunity to link their education to a future goal.

RESULTS AND DISCUSSION

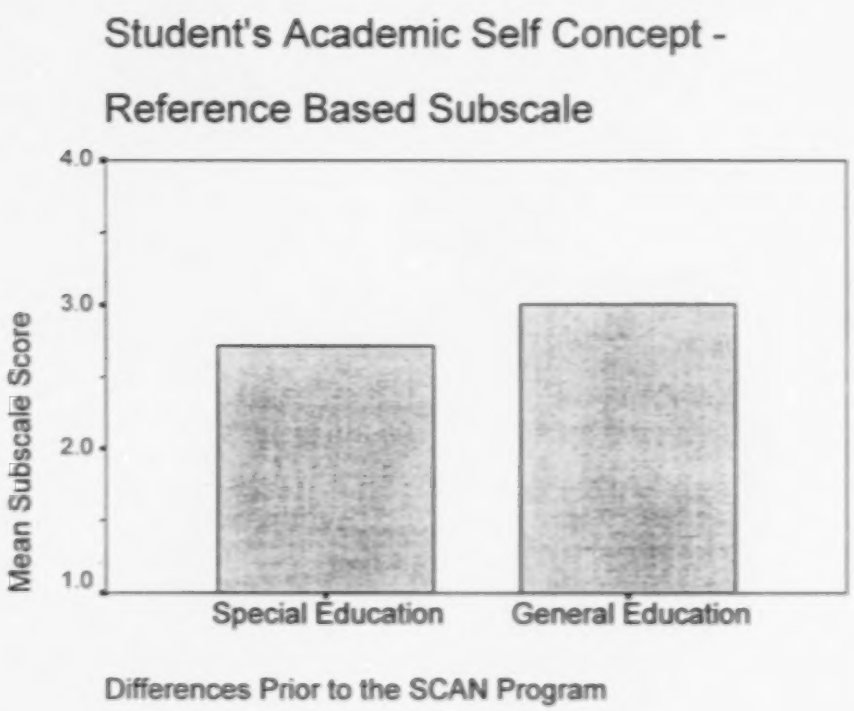
Goal 1, to strengthen skills leading to increased employability of all students, was thought to manifest itself in school attitude. Teachers administered the School Attitude Measure (Scott, Foresman and Company, 1980) at the beginning and ending of the program to assess changes in student attitudes toward their school experience on five subscales: a) motivation for school, b) academic self concept performance based, c) academic self concept reference based, d) sense of control over performance, and e) instructional mastery. Statements in the academic self-concept–performance based subscale are concerned with the students' confidence in their academic abilities and their feelings about their school performance. Statements in the academic self-concept reference based subscale are concerned with how students feel other people at school feel about their school performance and ability to succeed academically. The subscales of the school attitude measures used in this evaluation offer reliability values between .69 and .80. Additionally, technical literature provided by the test manufacturer states that three methods were used to assess the validity of each of the subscales.

Standardized Testing

The research design allowed for two types of comparisons: a) checks to see that various groups began the program at the same level, and b) comparisons of program effects between groups. To understand if there were program effects, the research design called for a check to see if there were differences between general and special education groups at the beginning of the program in the site visit condition. If they started with different scores, then the interpretation of the post-test results may change.

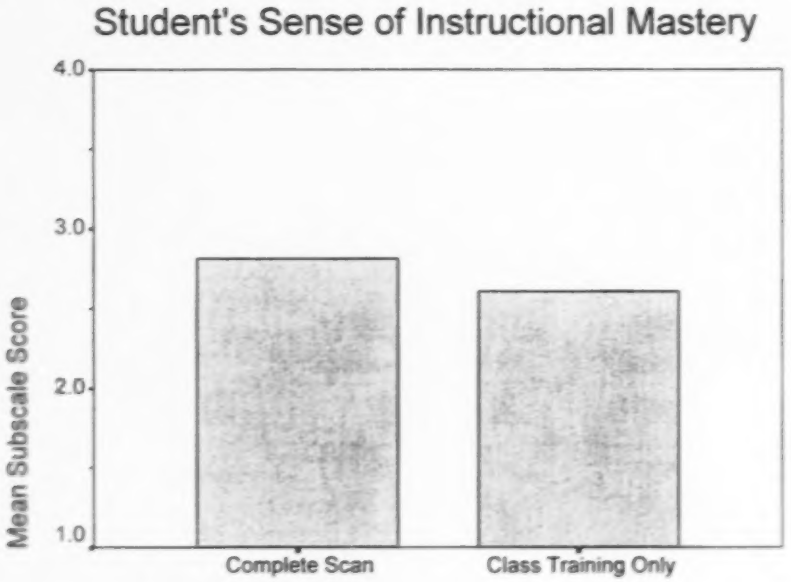
Of the five School Attitude Measure (SAM) subscales, only the academic self-concept reference-based differed between the general and special education groups. Special education students began the study with slightly lower scores than the general education students. Special education students responded that other people at school felt less optimistic about special education students' school performance and their ability to succeed, while general education students felt that others at school had more optimism for their school performance and ability to succeed. Since the groups do not differ in the post-test observation, it is reasonable to conclude that special education students slightly increased their academic self-concept reference-based as a result of the site visit condition.

Figure 1.



Next the research design called for a check to see if general education students in sensitivity/employability skills training group differed from general education students in site visit group at the beginning of the program. General education students in the sensitivity and employability skills training may have begun with a slightly lower sense of instructional mastery.

Figure 2.

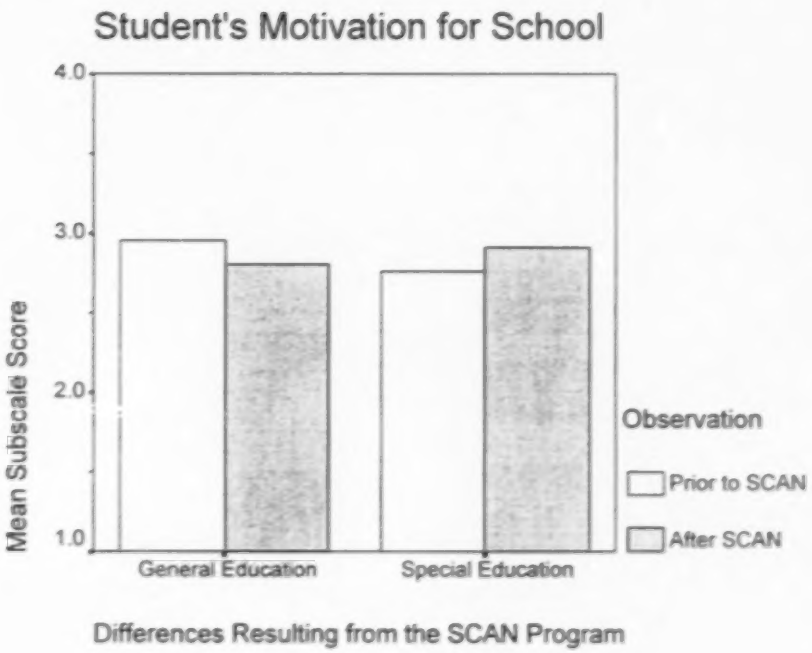


Differences Prior to SCAN Program

General Education Students Only

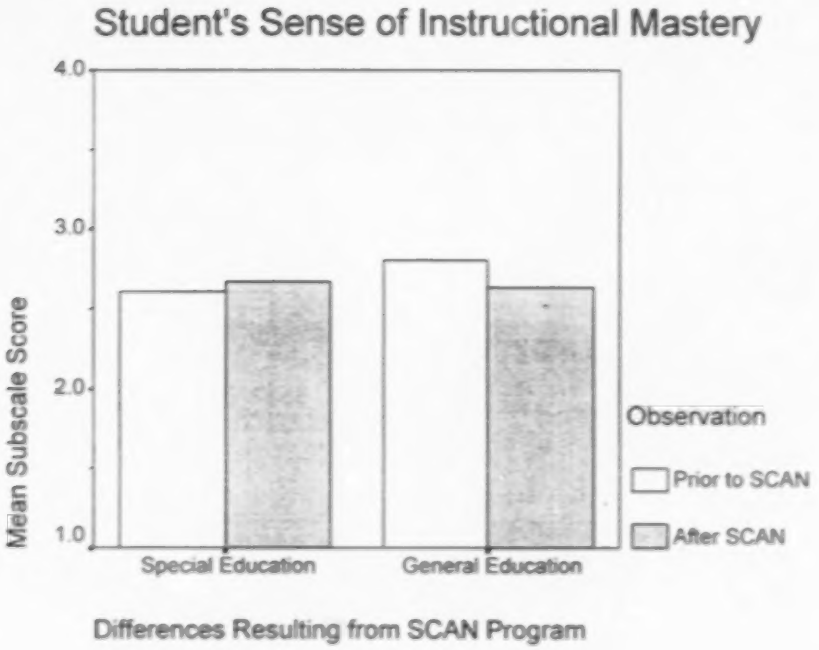
The first program effects question asks if the site visit improved both general and special education student's attitude toward school. Of the five subscales on the SAM, there was a clear trend for special education students to slightly increase their motivation for school and for general education students to slightly decrease their motivation for school. Additionally, there may have been a trend for both special and general education students to slightly decrease their academic self-concept performance based attitudes. Such a trend may be confirmed in subsequent research.

Figure 3.



Another question regarding program effects concerns whether the site visit is an important part of the program for general education students. General education students who experienced the sensitivity/employability skills training maintained their attitude about their instructional mastery, while general education students who experienced the sensitivity/employability skills training along with the site visits experienced a decrease in their sense of instructional mastery. The finding that, in the beginning of the program, the sensitivity/employability skills training only group differed from the SCAN group should not change the interpretation that the site visit tended to lower the participants sense of instructional mastery.

Figure 4.



The final question was to determine whether special education students in SCAN differed from special education students in the control group. Groups exhibited no reliable differences on any of the five SAM measures. It was impossible to perform a repeated measures design for this question due to small sample sizes and changing class composition. Given that the special education population showed small effects in motivation for school (Figure 4), supports the use of a repeated measures design. Results from this question may have been different had a repeated measures design been used.

Classroom Assessment of Attitude Change

Two of the program designers assessed student attitude change by examining in-class assignments given before and after students' participation in SCAN. Teachers gave students an attitude survey prior to program participation and looked for evidence of student attitude change in a paragraph writing assignment. Their full report is found in Appendix B. The program developers' summary follows:

> We conclude from these data that both the control group and the SCAN group students increased their desire to work with special education students over the school year. Overwhelmingly, data indicates that both groups, whether through sensitivity/employability skills training only or sensitivity/employability skills training combined with actual job site visits, were more positive about working with students with disabilities as a result of their experiences. This result may be due to the high visibility of special education students in the general school environment. The special education entrepreneurial businesses are popular with the general education students and give all students a chance to interact with the special education students.

To summarize the program's accomplishments towards Goal 1, program designers appear to have met the goal of strengthening skills leading to increased employability of all students. Special education students increased their motivation for school apparently because of their SCAN program involvement. Program developers may seek input from general educators to bolster program effects for general education students. The decline in motivation for school in general education students may indicate that they re-evaluated their own skill level as a result of visiting the work sites. Such a reduction may ultimately influence the study habits of students by making them more conscientious. Alternatively, the decline in motivation for school may result in students feeling intimidated and giving up on their studies. Tests of these hypotheses may include analyzing performance on state competencies or conducting comparisons of dropouts between SCAN participants and non-SCAN participants. Finally, the site visit appears to be an important component of the program. Although positive effects were found for the sensitivity/employability training group, the students in the SCAN program exhibited the most dramatic effects in the areas of motivation and instructional mastery.

Goal 2, to design all activities to meet general education goals, was evaluated according to the objectives in the proposal. The tables below show how general education goals were met for each activity.

Sensitivity/Employability skills training

Occupational Interest Inventory, Behavioral Styles Survey, and disabilities health issues were all used as part of the sensitivity/employability skills training.

Curriculum	Purpose	Objective
Teacher gave lectures and worksheets on employability skills	Introduce students to the attitudes that employers look for	Generic employability skills all companies require
Teacher gave lectures and worksheets on NM Education Systems Employability Skills and Competencies	Introduce students to NM Employability Skills and Competencies	NM standards of employability are discussed by the job site hosts
Teacher made lectures and worksheets on general health topics as they relate to disabilities and social attitudes towards people with disabilities	Introduce students to issues related to people with disabilities	Health relating to disabilities

Landscape activity

Program planners focused on the value of employability skills such as teamwork, interpersonal skills, work ethics, creative thinking, mathematics competency, and communication skills both written and verbal.

Activity Assignments	Purpose	Objective
Task assignment was customized to the ability levels of each of the special education students according to each of their IEPs	To ensure that all students participate in the activity	Individualized Special Education IEP goals using Life Center Career Education's curriculum and goals
The activity was parsed into smaller jobs so that small groups would each take on the responsibility of completing their portion of the activity	To demonstrate that most jobs are shared and coordinated	NM standards of employability are highlighted as examples arise during the activity

Site visit

Each work site presenter was given advanced materials and verbal instructions that pointed out the importance of showing the variety of jobs available at the site. Additionally, work site

presenters were asked to focus presentations on the relevancy of school academics at their particular work site. Also, work site presenters had the opportunity to emphasize the need for adult social skills and the need for specific kinds of knowledge and skills specific to the work site. The table below shows each of the advanced materials provided to the presenters and the purposes of the materials.

Source	Purpose	Objective
The new basics, Vocational Education Journal, May, 1992, p47	Suggests topics to highlight in presentation	Generic employability skills all companies require
New Mexico's Education System for Employability, NM SDE	Lists state goals for skills & competencies	Generic employability skills all companies require NM standards of employability are discussed by the job site hosts including
School to work: making the vital link, Middle Years, Nov/Dec, 1994 p22-25	Provides perspective and motivation for the visit.	

The goal of designing all activities to meet general education goals was met in very general ways. The preliminary information provided to presenters gave direction and suggestions that guided their presentations toward meeting educational goals. Employers rarely gave specific examples of how content areas like math are used on the job site. Perhaps job site presenters would be unwilling to prepare an entire math lesson; however, providing a planned example would demonstrate the necessity of connecting specific knowledge and application of that knowledge at work, further increasing the value of the job site visit. Connecting specific knowledge to application is the purpose of the site visits and is approached in a general fashion. Providing specific demonstrations that a work-site presentation uniquely offers may more concretely demonstrate connections between knowledge and its application on the job.

Goal 3, program planners expanded inclusive practices by pairing general education with special education students throughout the activities. Students not only learned about each other, but they learned to work with one another. Nine of twenty-two special education teachers in the school participated along with one general education teacher.

Video Data

Program designers expected that general and special education students would change their interactions with one another as a result of being paired for the duration of the program. To assess the change in the interactions among general education and special education students, an activity was planned where students worked together on a classroom assignment. This activity was recorded on videotape at the beginning of the program and again at the end of the

program. Interactions are by definition between individuals, so general and special education student pairs were considered a single unit. Frequency and duration of interactions were observed. Behaviors observed comprised two types, verbal and non-verbal behaviors. Eliciting cooperation was considered the initiation of an interaction either verbal or non-verbal. Interactions were not always cooperative, and these too were observed. Videotape was analyzed for changes in the interactions among students throughout the program.

The method used for coding behavior recorded on videotape yielded a reliability of .79. This level of reliability was reached by counting agreement as one of the first two responses being the same between observers regardless of order of presentation. The reliability for behavior duration coding was .92.

Results of the videotape analysis are inconclusive because only five dyads participated in both the first and last video taping sessions. The small sample size resulted from an unfortunate string of scheduling exceptions such as "take your child to work day" and an outing where the assignment to be videotaped was inadvertently unavailable for the outing. The following questions were designed for quantitative analysis, but will be treated as qualitative for the purposes of this discussion because of the small sample size.

Program designers expected that the duration or number of interactions would change as a result of the SCAN program. For four dyads the number of interactions decreased and the mean duration of interactions decreased. The remaining dyad increased the number and duration of interactions.

It was expected that the types of interaction would change as result of the SCAN program. The number of assignment-oriented behaviors decreased in the last videotaping relative to the first. Additionally, the number of behaviors that would compete with assignment completion did not change.

These results appear to suggest that both duration and number of interactions involved in completing the assignment decreased as a result of the SCAN program. A number of interpretations are suggested. It may be that students became sufficiently adept at completing the assignment after having completed it five times that they needed to communicate and interact very little to finish the assignment at the end of the program. Another explanation is that the general education students took over the role of completing the assignment, rather than having the patience to interact with their special education counterpart. This explanation may be supported by the fact that educational assistants were seen completing tasks for special education students, rather than contributing to the independence training of the special education students. A third explanation is that the fifth dyad represents the population best and that the other four dyads are aberrant. Another explanation is that the videotaped assignment poorly represents the interactions of the dyads. This explanation is supported by the casual observations of school based observers. Future videotaping may take advantage of the entrepreneurial setting of the special education student's vending setting for a different and perhaps more representative set of interactions with general education students.

Other Measurers

Sensitivity/Employability Skills Training:

SCAN teachers collaborated in planning curriculum content. Sensitivity/Employability training was considered the introduction required for general education and special education students to become more tolerant of one another.

Objectives for Landscaping Project on School Grounds:

General and special education teachers planned the landscaping activity together. General education and special education students were introduced to one another. Students practiced teamwork and cooperation as demonstrated by the completion of the project together. The principal and some general education teachers not involved with the program reported that general and special education students became more tolerant of one another and initiated positive social interactions with one another as a result of the SCAN program. Such interactions had previously been rare.

Objectives for Job Related Site Visit:

Teachers planned site visits together. Throughout the program students were occasionally absent; nonetheless, general education and special education students continued to participate with temporary partners. General education and special education students became more social and friendly with one another as a result of working toward common goals within common settings as reported by the principal. Furthermore, teachers not associated with the program reported similar observations. Finally, SCAN promoted teamwork among teachers which is important to a unified education approach to education.

The goal of expanding inclusive practices met with little enthusiasm from general education staff. The program self promotes collaboration because of the students enthusiasm and its direct school wide presence. In this inaugural year of the program the program developers could have hoped for more collaboration with the general education teachers; however, as a developing program it is prudent to grow slowly as general education staff buyin slowly. The program may also gain support from general educators when they collaborate to improve the program's effects upon general education students. The staff's feeling of general and special education students being more tolerant of one another was not supported by the current videotape data. The difficulty of collecting standardized interactions may be surmounted by more careful planning, or alternatively a more appropriate setting for interactions may be videotaped. The procedures developed for scoring behaviors are somewhat time consuming but reliable.

Goal 4, to contribute to staff development, was met in three ways. First, special education and general education teachers worked together for the sensitivity/employability skills training, as well as worked together organizing field trips. Second, teachers at L. B. J. were provided with a seminar by the U.S. Dept. of Labor that addressed issues related to School-To-Work, employability issues, and the job market of the future. Third, program leaders presented descriptions of the program at the New Mexico Federation of the Council for Exceptional Children, the Council for Exceptional Children Annual Conference, the APS Summer Institute, university graduate classes, as well as at a conference of the ARC of New

Mexico. At times as many as eleven teachers participated in up to 30 hours of staff development.

The SCAN program goal of contributing to staff development met three out of four of its stated goals. No seminars on inclusive practice were held. Such a seminar should be carefully timed with the interest and buyin of the school staff. The first year of implementation may be too soon for such a seminar. Program planners may carefully measure interest in the topic before spending money on a seminar speaker.

Goal 5, to increase parental involvement, comprised many efforts. The marketing of the program throughout the district included an article in the APS newsletter (Perspective, February 13, 1998). Twelve newsletters and a bulletin board in the L. B. J. entrance area were also used to popularize and inform the school community about the program. Two parents participated at the ARC Conference, and one participated in an invited university discussion of assessment of disabled students. Four parents chaperoned students during site visits.

The goal of increasing parental involvement may show greater results in future years. The opportunity to rely on parents as resources was limited by the program planners' knowledge of possible parental contributions. In the inaugural year, program developers were busy setting schedules and collecting resources for employer presentations, which precluded the personal attention required to solicit parental contributions to the program. As curriculum is gathered and organized, program developers will begin to have more time to solicit parental participation.

SUMMARY AND RECOMMENDATIONS

This first year of program implementation followed the proposal very closely. Program planners expected a larger participation from the general education staff. Because of the enthusiasm of both general and special education students, the coming year may show larger participation on the part of general education staff who include their students in the SCAN activities. Additionally, the SCAN planners may solicit program input from general education staff to improve the effect of the program on the general education population.

The SCAN program increased special education student's motivation for school and may have given both special and general education students a more realistic view of the work place as evidenced by their change in motivation for school subscale scores. The site visit lowered general education student's sense of instructional mastery. This may be interpreted as giving general education students a more realistic view of the workplace.

Special education and general education students were thought to be more sociable and to have interacted more often in the school context. Staff saw general and special education students conversing with each other using first names. General and special education students also accompanied each other to the bus. Such interactions were thought by school staff to be an improvement over previous years. The video data did not demonstrate the improved interactions seen by staff. In fact, video data suggests that staff may require specific

professional development regarding independent functioning of special education students. If general education students provided a means for special education students to complete goals by just observing, then the special education students missed the opportunity to complete goals and learn independently. Staff modeling and instruction in the sensitivity/employability training that specifically addresses independent living issues may produce improvements in general and special education student interactions.

Program planners may provide presenters at work sites with specific examples of the kinds of general education lessons that could be addressed at their site. Although coordination of classroom curriculum with work site presentations may provide practical challenges for teachers and presenters alike, the connection of work site requirements with classroom curriculum is a major characteristic of school to work programs.

IDEA Federal legislation requires that high school special education students receive a transition plan from the school environment to the student's next phase of life, usually the work environment. The transition plan must begin 3 years prior to graduation, with informal transition planning to begin no latter than age 14. The current SCAN program provides experience and information to students prior to the time that a transition plan must be enacted. The transition plan can therefore begin with students who have higher levels of functioning and knowledge about the workplace. Additionally, parents will be a more integral piece of students' educational experience due to the fact that parents will be used as resources for speakers, and for site visits. Teachers who participate will have more direct knowledge of what kinds of ability levels are required of students in the workplace, and will have discussed long range outcomes with their students. Teachers will choose their curriculum with these considerations in mind. Employers participate actively in curricula decisions on an advisory basis.

Sustainability

Generally, funds are required for transportation to see work site presentations. If work-site outings increase student motivation to learn, then the relatively small expenditure for transportation may pay off in terms of higher student achievement or fewer drop-outs. Although special classroom materials are required for ecological demonstrations, the ecology center required only a one-time expenditure. The facility may continue to serve the L. B. J. student body with carefully planned materials and student run maintenance activities. The close association with the business community provided new opportunities for grants as well as business/community donations. Coca-Cola and Furr's provided individual grants of $1,000 each to support the SCAN program.

Future Program Components

SCAN program planners will include articulation among sixth, seventh and eighth graders for those students involved in the program. Sixth grade students will hear guest speakers from many professions discussing the kinds of jobs available in their field. Seventh graders continue to build career awareness by visiting local businesses that present a portion of the integrated employability skills curriculum. Eighth grade students begin to sample and

shadow various jobs available in the community as well as participate in short term internships.

Future Evaluation

As the SCAN program evolves and adjusts to the needs of the L. B. J. student body, evaluation should continue to track social interactions between the special and general education students. The kinds of interactions facilitated by the SCAN program have not been firmly established. Additionally, the effects of only a one year participation in the SCAN program could be difficult to detect using widely accepted methods. If students received three consecutive years of SCAN training, program effects would be easier to detect. Additionally, the need for pre-testing and post-testing of students participating in SCAN would be limited to the beginning of sixth grade and the end of eighth grade. Such a testing plan would reduce classroom instructional interruptions. The proposal process only improved the program's goals and its evaluation efforts. This process may be used to focus future goals and objectives.

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APPENDIX A
Program Goals

1) To strengthen skills leading to increased employability of all students:

This goal has been a major focus of the School-To-Careers program at APS. This goal is particularly important to low functioning students for increasing future employability. Finding the specific abilities and interests of these students may require special attention to assistive devices or a breadth of exposure to many kinds of tasks. Additionally, job related attitude and behavioral expectations are discussed. For example, the consequences of arriving to work intoxicated, dealing with difficult coworkers, and dress codes are discussed.

Objectives for Sensitivity/Employability Skills Training:

i) Teach job skills especially work place attitudes,
ii) Problems with stereotypes,
iii) Examine disabilities,
iv) Solutions using assistive technology,
v) Adult speakers with disabilities,
vi) Lessons on self determination.

Objectives for Landscaping Project on School Grounds:

i) Teach job skills, especially work place attitudes,
ii) Schools become more sensitive to work place requirements,
iii) Expose students to variety of job types,
iv) Promote team work among students by requiring team completion of assignments,
v) Establish realistic career expectations,
vi) A more goal oriented focus is essential to students at risk of dropping out.

Objectives for Job Related Site Visit:

i) Teach job skills, especially work place attitudes (e.g. safety values & social skills),
ii) Employers become more tolerant of hiring students with disabilities (ADA),
iii) Schools become more sensitive to work place requirements and teachers hear job site concerns,
iv) Expose students to variety of job types,
v) Promote team work among students by requiring joint completion of assignments,
vi) Goal setting and increased self knowledge based on experience,
vii) Expose students to the full array of jobs at each business.

2) Design all activities to meet general education goals:

All SCAN activities are APS priorities for general education issues. For example, biology, physics and health are taught at various site visits; however, the focus is applied in an actual workplace rather than on lessons from a book. Additionally, information on how to get along with others, and tolerance for individual differences are considered important general education goals. Generic employability skills all companies require are considered general education goals. There is an emphasis on integrated contextualized academics, improving basic and core academics connecting L. B. J. Middle School to its cluster schools

and community resources. Training on establishing lifelong goals for successful transition into the workplace is provided.

Objectives for Sensitivity/Employability Skills Training:

i) Generic employability skills all companies require,
ii) Health relating to disabilities.

Objectives for Landscaping Project on School Grounds:

i) NM standards of employability are discussed by the job site hosts including: leadership, task analysis, team work, negotiation skills, interpersonal skills, work ethics, problem solving, listening, and speaking skills,
ii) Special Education IEP goals using Life Center Career Education's curriculum and goals.

Objectives for Job Related Site Visit:

i) Applied science and physics – PNM,
ii) Applied business theory - Coca-Cola,
iii) Applied business theory – Hilton,
iv) Public health issues – Lovelace,
v) Applied business theory & technology- American Airlines,
vi) Communication studies & applied technology - KOB TV.

3) Expand inclusive practices:

By pairing general education and special education students throughout the activities, students learn about each other and learn to work with one another. Program designers hope that students from our district with SCAN experience will become natural peer supports of integrated practices in the workplace as adults.

Objectives for Sensitivity/Employability Skills Training:

i) By working together general education and special education students become more tolerant of one another,
ii) Promote team work among students - students complete assignments together,
iii) Promote team work among teachers - teachers plan activities together.

Objectives for Landscaping Project on School Grounds:

i) Introduce general education and special education students to one another,
ii) General education and special education students become more tolerant of one another as a result of working toward common goals within common settings,
iii) Promote teamwork among students - students complete projects together,
iv) Promote teamwork among teachers - teachers plan activities together.

Objectives for Job-Related Site Visit:

i) Continue to introduce general education and special education students to one another,
ii) General education and special education students become more tolerant of one another as a result of working toward common goals within common settings,
iii) Promote teamwork among students - students complete assignments together,
iv) Promote teamwork among teachers - teachers plan activities together.

4) Contribute to staff development:

Staff development will be met in three ways. First, special education and general education teachers will work together for the sensitivity/employability skills training, as well as working together organizing field trips. Second, teachers at L. B. J. will be provided with three seminars that address issues related to inclusive practices, School-To-Work, or employability issues. Third, evaluation results will be disseminated to faculty members for educational purposes, for feedback, and for further planning. Workshops, articulation meetings, collaborations with UNM, publications, and presentations at conferences will be used to disseminate results of evaluation efforts.

Objectives for professional and staff development:

i) Promote teamwork among teachers

ii) Teachers collaborating - shared resources, heterogeneous groupings of students, articulation within cluster, and the possibility of post secondary options all of which promote unified education practices

iii) Staff development/planning meeting School-To-Work (1/26), working together to get students out to sites

iv) Increase staff development by adding seminars on inclusive practices

5) Increase parental involvement:

The staff at L. B. J. will market the program to increase parent acceptance of inclusive activities. Newsletters, parent-sponsored fundraisers and conferences are planned. Parents are considered resources for speakers, internships, apprenticeships, job sampling/shadowing, and site visits. Parents are also considered resources for transportation, chaperones, and mentoring.

Objectives for increasing parental involvement:

i) Increase use of parents as resources by soliciting them to be hosts at a site, classroom visitors to talk about their careers or speakers on disabilities issues

ii) Increase parent involvement by having them volunteer as chaperones

APPENDIX B
Classroom Assessment of Attitude Change
By Kristen Cruser and Shelly DeAbreu

Question: Did general education students, who shared educational experiences along with students with disabilities, change their perceptions of students with disabilities, as measured through paragraph writing assignments (pre/post)?

We chose to evaluate attitude changes in work with two groups of seventh grade general education social studies classes. The first group was our control group and as such received only sensitivity/employability skills training. While receiving the same number of class periods with the same materials as SCAN group, our control group had limited interactions to students with disabilities, and no exposure to employment sites. The SCAN group had both the sensitivity/employability skills training which covered topics related to students with disabilities. They also had exposure to working with the special needs population and visits to employment sites.

In both groups, our survey at the beginning of the SCAN project measured initial experience general education students had involving students with disabilities. We based our pre-test on two questions in a written survey. 1) Did general education students have exposure to people with disabilities prior to SCAN, either through knowing a family member with a disability or through being ever integrated in school settings? 2) Did students have any desire to work with students with disabilities? We offered students three choices--yes, no, and, maybe. To track students' changing perceptions, we only included the data from 36 students who responded in both the beginning and ending implementations of the survey .

Of 23 students who participated in sensitivity/employability skills training and had exposure to working with students with disabilities (the SCAN group), 17 expressed a desire to work with such populations, 3 students said they would not want the opportunity to work with students with disabilities, while 3 students expressed a desire to maybe work with students with disabilities. Of the 8 respondents in the control group, 3 students from this group expressed a desire to work with special education students, 3 students said maybe, and 2 students expressed no desire. 6 students in the control group indicated that they had prior experience with students with disabilities either through home or school exposure.

In our post-test, both groups wrote reaction paragraphs to the experience of working with students with disabilities. General education students were asked to write about their experience with special education students and if they would like to continue to work with them. We wanted to find out if, following the experience of working with students with disabilities,

students from general education had positive feedback from their [written] paragraphs reflecting a growing desire to work with students with disabilities. We found that of the 23 SCAN students who responded, 19 indicated that they desired to work with students with disabilities and would enjoy further interaction. In the control group of 8 respondents, 6 students expressed a desire to interact with students with disabilities after the sensitivity/employability skills training while 2 students remained negative, and zero students responded maybe.

We conclude from these data that both the control group and the SCAN group students increased their desire to work with special education students over the school year. Overwhelmingly, data indicates that both groups, whether through sensitivity/employability skills training only or sensitivity/employability skills training combined with actual job site visits, were more positive about working with students with disabilities as a result of their experiences. This result may be due to the high visibility of special education students in the general school environment. The special education entrepreneurial businesses are popular with the general education students and give all students a chance to interact with the special education students.